
Homework 3 - Percentages

Remember to explain your thinking by showing working.

Calculator allowed

1. The distance from the sun to an asteroid is 5.2×10^8 km, and the speed of light is 3×10^5 km/sec.
How long does it take for a beam of light to travel from the sun to the asteroid?
Answer in minutes, to 3 significant figures.
2. Julie bought a piano for £3000 three years ago. Its value has depreciated by 18% each year since then. Calculate the current value of the piano.
3. A house which cost £43000 four years ago has appreciated in value by 1.5% each year since then. Calculate the current value of the house.
4. A food processor has been reduced in price by 20% and now costs £120. What was the original price of the processor?
5. The value of a bungalow has appreciated by 6% in the last year. It is now valued at £180000. What was its value last year? Give your answer to the nearest pound.
6. Ben measured a tree in the local park and found it to be 12 metres tall. He told Bill that this was a 15% increase in height since last year. Bill thinks the tree must have been 10.7 metres high last year. Is he correct? Explain your answer.